

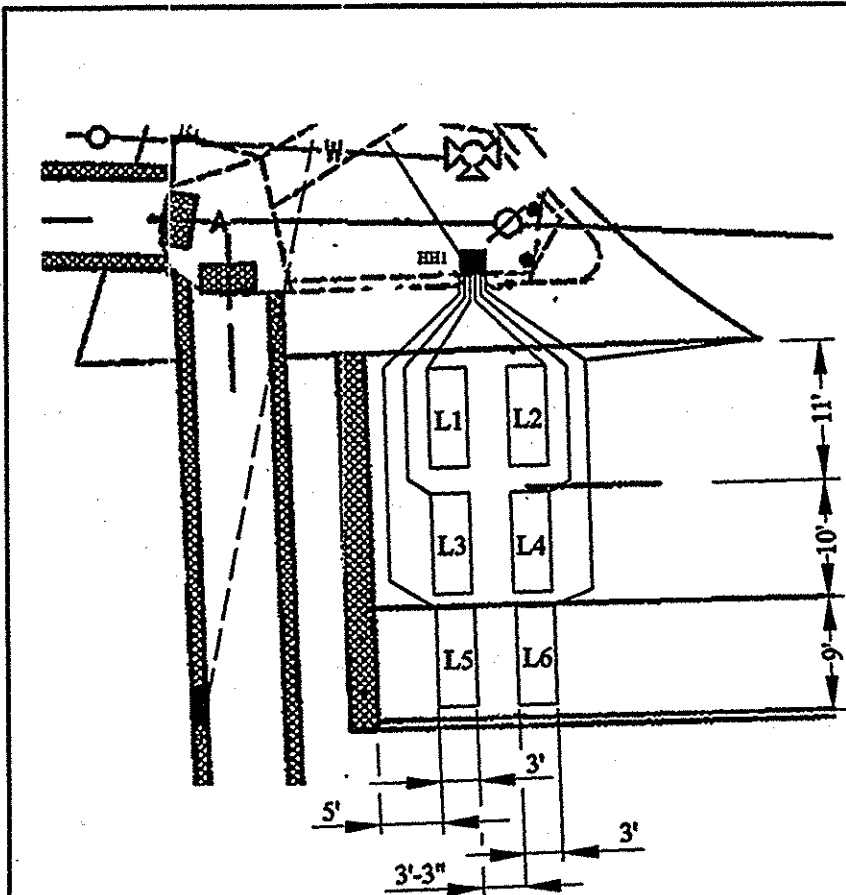
GENERAL CONSTRUCTION NOTES:

INSTALLATION AND CONSTRUCTION SHALL CONFORM TO THE STATE DEPARTMENT OF TRANSPORTATION STANDARDS SPECIFICATIONS SECTIONS APPLICABLE AND STANDARD PLANS DATED AND EFFECTIVE FOR THE CURRENT YEAR AND ANY SPECIAL STATE CODE PROVISIONS.

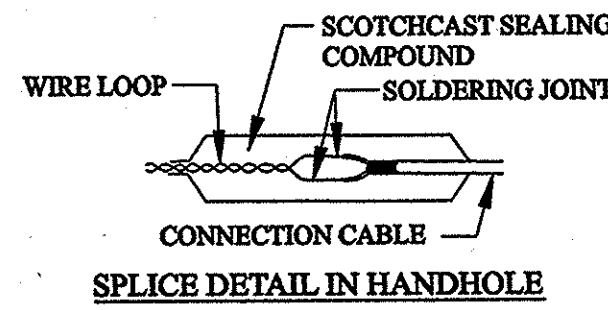
- THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES IS APPROXIMATE. THE SUBCONTRACTOR SHALL DETERMINE THE LOCATION AND DEPTH OF ALL UTILITIES INCLUDING THOSE NOT SHOWN ON PLANS AND VERIFY ALL JOBSITE CONDITIONS, HAND EXCAVATE FOUNDATION UNTIL CLEAR OF ALL SUBSTRUCTURES AND PROTECT ALL FACILITIES DURING CONSTRUCTION. SUBCONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS FOR UNDERGROUND UTILITY REMOVAL OR LOCATION WITH RESPECTIVE UTILITY OWNERS AS MAY BE REQUIRED SUFFICIENTLY IN ADVANCE TO PREVENT DELAY IN OPERATIONS.
 - THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UNDERGROUND UTILITIES ENCOUNTERED IN AREAS WHERE EXCAVATIONS ARE INDICATED AND SHALL REPAIR ANY SUCH DAMAGE AT OWN EXPENSE. WHERE UTILITY LINES MUST BE MAINTAINED UNDER STRUCTURE, THEY SHALL BE PROPERLY SLEEVED THROUGH FOUNDATION.
 - THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OR REPAIR OF ANY DAMAGE CAUSED BY THEM OR THEIR SUBCONTRACTORS.
 - THE SUBCONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND NOTIFY ALL UTILITIES AND THE STATE AT LEAST 72 HOURS IN ADVANCE OF CONSTRUCTION.
 - SUBCONTRACTOR SHALL USE A 3M 3800 SPLICE KIT TO CONNECT THE LOOP LEAD-INS TO THE CONNECTION CABLES.
 - THE SUBCONTRACTOR SHALL CALL THE PRINCE GEORGE'S COUNTY TRAFFIC DIVISION, (301) 883-5650, FIVE (5) DAYS PRIOR TO THE START OF WORK FOR A TRAFFIC CONTROL PLAN APPOINTMENT.
 - THE SUBCONTRACTOR IS REQUIRED AND MUST SUBMIT A WEEKLY SCHEDULE PRIOR TO START OF WORK EACH WEEK. (NO EXCEPTIONS)
 - THE PROPOSED EQUIPMENT LOCATIONS SHALL BE AS SHOWN ON SITE PLAN. THE SUBCONTRACTOR SHALL VERIFY EQUIPMENT FIELD LOCATIONS WITH THE STATE TRAFFIC ENGINEER OR LOCAL AND/OR EXCAVATION AUTHORITY AND ATS PRIOR TO INSTALLATION.
 - THE SUBCONTRACTOR SHALL SUPPLY AND INSTALL ALL CONDUCTORS NECESSARY FOR THE INTENDED OPERATION AS NOTED ON THESE PLANS, NEC AND ALL APPLICABLE STATE CODES.
 - ALL CONCRETE FORMS ARE TO BE INSPECTED BY LOCAL AUTHORITIES BEFORE CONCRETE IS PLACED.
 - THE SUBCONTRACTOR SHALL PROVIDE ALL NECESSARY TRAFFIC CONTROL DEVICES DURING RLC INSTALLATION.
 - INDUCTIVE LOOPS SHALL BE 36" X 96" (SEE LOOP DETECTION DETAIL) WITH FOUR (4) TURNS PER LOOP, UNLESS OTHERWISE SPECIFIED ON PLAN. THE LEAD HOME RUNS WILL BE INSTALLED TWISTED EVERY ONE (1) INCH INTO THE STUBOUTS PER STATE AND DOT STANDARDS.
 - THERE SHALL BE A MINIMUM OF 36" BETWEEN EXISTING LOOPS AND PROPOSED INDUCTIVE LOOPS.
 - INSTALL INDUCTIVE LOOP CABLE INTO PROPOSED HANDHOLE THROUGH 1" MINIMUM PVC CONDUIT SPACED 8" APART TO ISOLATE THE SIGNALING AND PREVENT INTERFERENCE.
 - ALL CUT LINES SHALL HAVE A MINIMUM SPACING OF 12".
 - ALL INDUCTIVE LOOPS AND CUT LINES SHALL BE PLACED A MINIMUM OF 40" FROM ANY METAL COVERS AND/OR GRATING IN ROAD SURFACES.
 - THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING AND COORDINATION WITH THE SERVING (ELECTRICAL) UTILITY COMPANY AND PAY REQUIRED FEES FOR SERVICE CONNECTIONS.
 - THE SUBCONTRACTOR TO OBTAIN A NO FEE ENCROACHMENT PERMIT FROM THE STATE PRIOR TO COMMENCEMENT OF WORK. ALL WORK SHALL BE INSPECTED BY STATE FORCES. AT COMPLETION OF PROJECT CONTACT THE STATE TRAFFIC ENGINEER 24 HOURS PRIOR TO COMPLETION OF WORK.
 - THE SUBCONTRACTOR IS TO BUILD AND MAINTAIN A CONSTRUCTION BARRICADE (ALL NECESSARY LIGHTS, SIGNS, ETC. IF REQUIRED) FOR PROTECTION OF THE PUBLIC AS DIRECTED BY THE LOCAL AUTHORITIES.
 - ALL SUBCONTRACTORS TO PROVIDE LIABILITY INSURANCE AND WORKERS COMPENSATION BENEFITS IN ACCORDANCE WITH STATE LAW FOR ALL WORKERS AND AGENTS WHO WILL BE ON THE SITE AT ANY TIME WHILE PERFORMING WORK ON THIS PROJECT.
 - ALL WORK SHALL BE IN ACCORDANCE WITH NEC, ALL LOCAL, STATE AND FEDERAL CODES, ORDINANCES AND ANY APPLICABLE AMENDMENTS.
 - ALL DEBRIS, EXCESS MATERIAL, ETC. IS TO BE REMOVED BY THE SUBCONTRACTOR BY THE END OF THE JOB. JOB TO BE LEFT SUFFICIENTLY CLEAN AS TO WARRANT STATE APPROVAL.
 - THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS, FEES AND INSPECTIONS AS MAY BE REQUIRED FOR COMPLETION OF THE JOB AS PER ALL GOVERNING AGENCIES.
 - THE SUBCONTRACTOR TO PROVIDE COST ESTIMATE FOR ALL WORK SHOWN ON DRAWINGS AND WORK NORMALLY REQUIRED TO CARRY OUT THE DESIGN INTENT OF THESE DRAWINGS.
 - DRAWINGS ARE NOT TO BE SCALED. WORK SHALL BE GOVERNED BY DIMENSION ONLY. DISCREPANCIES BETWEEN THE DRAWINGS AND/OR THE EXISTING SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF AT'S IMMEDIATELY.
 - RLC EQUIPMENT SHALL NOT BE INSTALLED ON MEDIANS LESS THAN FIVE FEET (5') IN WIDTH.
 - RLC RELATED EQUIPMENT SHALL NOT BE INSTALLED WITHIN FIVE FEET (5') OF FIRE HYDRANT.
 - RLC RELATED EQUIPMENT SHALL NOT BE INSTALLED WITHIN FOUR FEET (4') OF ADA RAMPS.
 - SUBCONTRACTOR SHALL SUPPLY AS-BUILT DRAWINGS TO AT'S ENGINEERING DEPARTMENT WITHIN THIRTY (30) DAYS OF CONSTRUCTION COMPLETION.
 - SUBCONTRACTOR SHALL COMPLETE A "RLC POST CONSTRUCTION INSTALLATION ACCEPTANCE FORM" FOR EACH RLC INSTALLED. COMPLETED FORMS SHALL BE FORWARDED TO AT'S CONSTRUCTION DEPARTMENT.
 - THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE RESPECTIVE OWNERS AND OTHER AGENCIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
- CONTACT:
- * GAS COMPANY
 - * WATER DISTRICT
 - * PHONE COMPANY
 - * CABLE COMPANY
 - * LOCAL AND/OR STATE EXCAVATION AUTHORITY

SPECIFIC CONSTRUCTION NOTES:

- THE SUBCONTRACTOR SHALL INSTALL ALL SUBSTRUCTURES ACCORDING TO LOCAL GOVERNING AGENCY POST LINE REQUIREMENTS WHERE APPLICABLE.
- THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING PHOTO ENFORCEMENT SIGNAGE PER STATE STANDARDS.
- HANDHOLE COVERS SHALL HAVE MARKING "TRAFFIC SIGNAL".

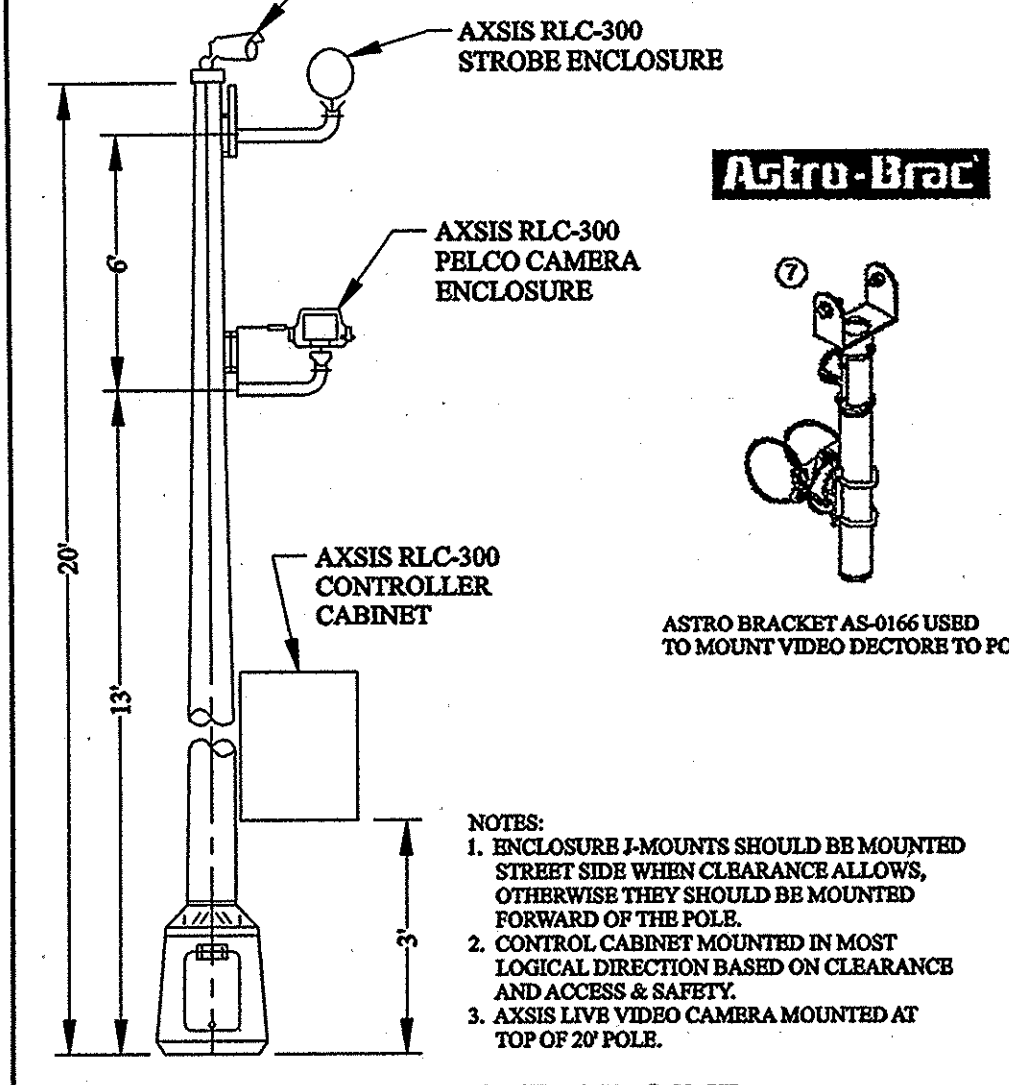
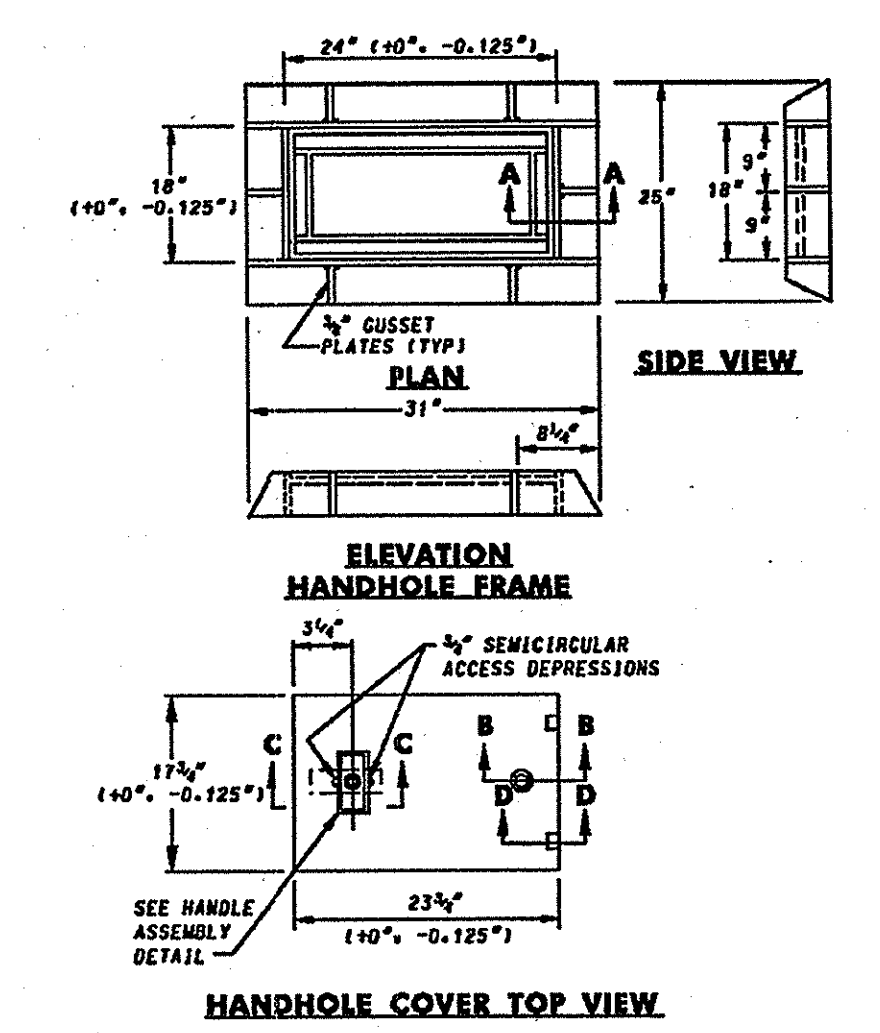


LOOP DETECTION DETAIL



- NOTES:
- ALL LOOPS ARE CENTERED IN LANE.
 - LOOPS ARE 36" X 96".
 - LOOP HOMERUNS ARE TWISTED EVERY 1 INCH AND RAN IN THEIR OWN SEPARATE CUTS TO HANDHOLE, THEN PUCK SPLICE WITH 3M 3800 SPLICE KITS TO 2/0 14 AWG CABLES THAT RUN BACK TO RLC CONTROL CABINET.

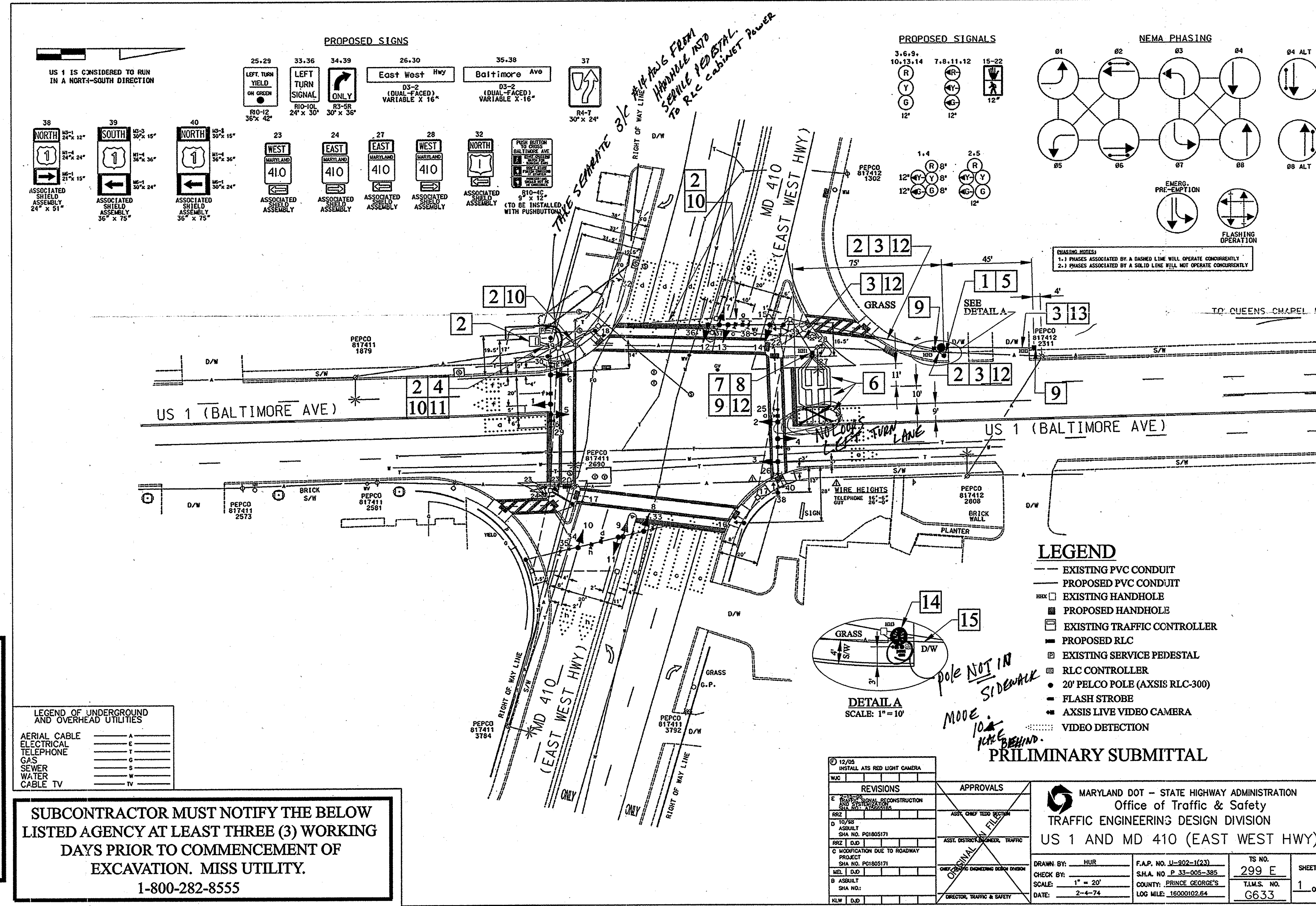
HANDHOLE FRAME AND COVER



20' TALL ALUMINUM POLE

WIRE DETAILS					
7/c 14 AWG	3/c 14 AWG	COMBO 3/c 16 AWG/COAX	CAT5	8281 COAX	
RED	RED PHASE	BLACK 110V+	BLACK 110V+	BLACK 110V+	
ORANGE	RED PHASE 2 OR NOT USED	WHITE 110V NEUT.	WHITE 110V NEUT.	WHITE 110V NEUT.	
GREEN	LEFT GREEN EARTH OR NOT USED	GREEN EARTH	GREEN EARTH	GREEN EARTH	
BLUE	LEFT AMBER OR NOT USED	COAX	COAX	COAX	
WHITE W/STRIPE	PHASE NEUTRAL COMMON				
BLACK	110V+				
WHITE	110V NEUTRAL				

WIRE SCHEDULE				
FROM	TO	CABLE	QTY.	LABEL
CONTROL BOX	HANDHOLE (HH2)	CAT5	1	DSL
STREET (LOOPS)	HANDHOLE (HH1)	LOOP 1/6 14 AWG TWISTED IN TO 2	6	L1, L2, L3, L4, L5, L6 - SEE LOOP DETECTION DETAIL
HANDHOLE (HH1)	RLC CONTROL CABINET	2/c 14 AWG PUCK SPLICE TO LOOPS	6	L1, L2, L3, L4, L5, L6 - SEE LOOP DETECTION DETAIL
RLC CONTROL CABINET	LIVE CAMERA	COMBO 3/c 16 AWG/COAX	1	LIVE
RLC CONTROL CABINET	PELCO CAMERA	CAT5	1	CAM-SYNC
RLC CONTROL CABINET	PELCO CAMERA	3/c 14 AWG	1	110V
PELCO CAMERA	STROBE	PROVIDED PWR & SYNC CABLES	1	STROBE PWR. STROBE SYNC.
RLC CONTROL CABINET	TRAFFIC CONTROLLER	7/c 14 AWG	1	PHASES
SERVICE PEDESTAL	RLC CONTROLLER	3/c 14 AWG		NOT AS PART OF 7/c. SEPARATE CABLE DIRECT TO SERVICE



- ADD #6 STRANDED BARE COPPER PEDESTAL. 6 AWG WIRE FROM CAMERA POLE BACK TO SERVICE PEDESTAL w/ GROUND RD IN HHS.
- ### CONSTRUCTION LEGEND:
- INSTALL PROPOSED 20' PELCO POLE AND CONTROLLER CABINET PROVIDED BY AT'S. INSTALL PROPOSED 2" DIA. PCC FOUNDATION PER MARYLAND DOT STATE HIGHWAY ADMINISTRATION STANDARD NO. MD 801.02. BOLT CIRCLES SHALL BE 3" DIA WITH 1" X 36" ANCHOR BOLTS.
NOTE: INSTALL TO LOCAL & NEC SPECIFICATIONS. 10' GROUND ROD AND #6 AWG STRANDED COPPER WIRE TO SERVICE CAMERA POLE FRAME AS EQUIPMENT BOND. - RUN TO PEDESTAL
 - INSTALL 2" PVC CONDUIT PER STATE SPECIFICATIONS, STUB INTO NEW OR EXISTING HANDHOLE.
 - INSTALL IN-LINE X AMP FUSED SPLICE CONNECTORS IN AC+ CABLES AND IN-LINE NON-FUSED DISCONNECT FOR AC- IN EXISTING HANDHOLE.
 - INSTALL CAMERAS AND STROBE AS INDICATED ON THIS SHEET. CAMERAS AND STROBE SHALL BE WIRED PER AT'S ELECTRICAL STANDARDS. SEE "WIRE SCHEDULE", "WIRE DETAILS" AND 20' TALL ALUMINUM POLE DETAIL.
 - INSTALL SIX (6) LOOP DETECTORS. SEE LOOP DETECTION DETAIL AND "WIRE SCHEDULE" ON THIS SHEET.
 - INSTALL SIX (6) STUB OUTS TO PROPOSED HANDHOLE. EACH LOOP LEAD WIRE SHALL BE CUT IN SEPARATE CHANNELS. SEE NOTE #12 IN THE GENERAL CONSTRUCTION NOTES, LOOP DETECTION DETAIL AND "WIRE SCHEDULE" ON THIS SHEET.
 - SPLICE LOOP DETECTOR LEAD-INS TO THE 2/c #14 AWG CONNECTION CABLE. SEE LOOP DETECTION DETAIL AND "WIRE SCHEDULE" ON THIS SHEET.
 - INSTALL NEW HANDHOLE - MARYLAND STANDARD MD 811.02, SEE DETAIL THIS SHEET.
 - USE EXISTING CONDUIT AND/OR HANDHOLES.
 - USE EXISTING HANDHOLE TO ACCESS TRAFFIC CONTROLLER.
 - INSTALL 2/c #14 AWG CABLE FROM THE LOOP DETECTOR LEAD-INS TO THE AXIS RLC-300 CONTROLLER CABINET. SEE "WIRE DETAILS" ON THIS SHEET FOR COLOR CODE.
 - INSTALL CAT5 CABLE. TERMINATE IN PROPOSED HANDHOLE FOR FUTURE COMM. HOOK-UP. SEE "WIRE SCHEDULE" AND "WIRE DETAILS" ON THIS SHEET.
 - TRIM EXISTING TREE IF NECESSARY.
 - * MAINTAIN 12" CLEARANCE FROM EXISTING OVERHEAD UTILITIES.
* NESC REQUIRES 24" Radial Clearance

SCOPE OF WORK FOR THIS PROJECT:

CONSTRUCTION OF RED LIGHT PHOTO CITATION SYSTEM AND ALL RELATED AND NECESSARY TRAFFIC SIGNAL MODIFICATIONS AS SHOWN AND NOTED ON THIS DRAWING PLAN.

NOTE:

ALL EXISTING CONDITIONS AS SHOWN ON THE DRAWING ARE INCLUDED FOR SUBCONTRACTOR CONVENIENCE ONLY. SUBCONTRACTOR SHALL EXAMINE THE SITE AND ALL AVAILABLE CONSTRUCTION DOCUMENTS TO DETERMINE THE EXTENT OF WORK REQUIRED.

SUBCONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS AND IS TO REPORT ANY DISCREPANCIES TO AT'S PRIOR TO COMMENCING ANY WORK, OR UPON ANY DISCOVERY OF PREVIOUSLY UNKNOWN JOB CONDITIONS.

SUBCONTRACTOR MUST NOTIFY THE BELOW LISTED AGENCY AT LEAST THREE (3) WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION. MISS UTILITY. 1-800-282-8555

ATS AMERICAN TRAFFIC SOLUTIONS

14861 NORTH SCOTTSDALE ROAD, SUITE 109
SCOTTSDALE, AZ 85254
TEL: 480.368.0900 FAX: 480.607.0901

RED LIGHT PHOTO ENFORCEMENT PLAN

IMPROVEMENTS FOR THE INTERSECTION OF:
BALTIMORE AVE. @ EAST WEST HIGHWAY
PRINCE GEORGE'S COUNTY, MARYLAND

Volkert & Associates, P.C.
5028 WISCONSIN AVENUE, N.W., STE 403 WASHINGTON, DC 20016

SCALE: 1" = 30'	APPROVED BY:	DRAWN BY: BCG
DATE: 12/01/05		REVISED:
		DRAWING NUMBER: DVA-PG-0102